

REMARKS / ARGUMENTS

Claims 1-16 have been presented for examination. Claims 2 and 7 have been canceled without prejudice and disclaimer of the subject matter recited therein.

Rejections under 35 U.S.C. § 103(a)

Claims 1-16 have been rejected under section 103(a) as being unpatentable over Weissman et al., U.S. Patent No. 6,212,524, in view of Rogers, U.S. Patent No. 6,212,515. Applicants respectfully disagree.

To properly reject a claim under section 103(a), the Manual of Patent Examining Procedure imposes a burden on the Patent Office to establish a *prima facie* case of obviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of non-obviousness.

M.P.E.P § 2142. There are three basic criteria to a case of *prima facie* obviousness: i) there must be some suggestion or motivation to modify the references or combine the reference teachings; ii) there must be reasonable expectation of success in modifying or combining the references; and iii) the prior art references must disclose or suggest all of the limitations of the claimed invention. *Id.* In the present case, the Office Action has failed to establish, at a minimum, a suggestion or motivation to modify the references or combine the reference teachings.

Weissman et al. cannot be properly combined with Rogers. Weissman et al. is directed towards generating and populating a datamart for specific applications using raw data from a source system and requires “a great deal of consistency in the use of data” from a source system

(see col. 2, lines 47-50). Weissman et al. further requires that the “datamart operate in a consistent manner” so that “results are consistent in meaning from query to query.” (See col. 5, lines 22-25). In contrast, Rogers requires selecting “the best partition from which to aggregate data ‘on the fly’ without maintaining a database of appropriate partitions to aggregate from.” (see col. 1, line 65 – col. 2, line 3, emphasis added). Rogers’ ‘on the fly’ selection of partitions based on the processing time is inconsistent with, and accordingly teaches away from, Weissman’s requirement of consistency of query results. Thus, Weissman et al. cannot be properly combined with Rogers.

Further, it will not be obvious to one having ordinary skill in the art to modify Weissman et al. with the teaching of Rogers. The Examiner’s reasoning for motivation is hindsight reconstruction of the cited references, which is impermissible under MPEP §2143.02. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” See MPEP §2143.01. Contrary to the Examiner’s assertion, Weissman et al. does not require indications of a level aggregation. In Weissman et al., “[t]he aggregates correspond to pre-computed query results for different types of queries.” (See col. 5, lines 38-48, emphasis added). According to Weissman et al., the aggregates are specified using schema, which are defined by a consultant during the population of the datamart. Thus, levels of aggregations are not applicable to queries in Weissman et al. Furthermore, Rogers does not use levels of aggregation; instead, Rogers uses levels of corresponding dimensions to determine the processing cost for aggregation. Accordingly, it will not be obvious to one having ordinary skill in the art to modify Weissman et al. with the teaching of Rogers.

Furthermore, Weissman et al. does not teach ‘levels of dimension.’ In rejecting claim 1, the Examiner has stated that the ‘hierarchy for dimension’ attribute of a metadata described in the cited sections of Weissman et al. teaches ‘levels of dimension’ as recited in claim 1.

Applicants respectfully disagree. In the cited sections, Weissman et al. describes the ‘hierarchy for dimension’ as an attribute that indicates a corresponding aggregate builder group (*see* col. 28, lines 43-45). According to Weissman et al., the ‘hierarchy for dimension’ attribute functions with a ‘group by’ attribute, which determines whether a particular dimension column should be included in an aggregate builder group. These attributes are part of a runtime metadata, which describes a physical column of a physical table in the datamart. The runtime metadata is used by a runtime schema to repopulate tables in the datamart (*see* col. 27, line 14 – col. 29, line 8). Thus, the ‘hierarchy for dimension’ attribute of Weissman et al. does not teach ‘levels of dimension,’ and more specifically, it does not teach a level of aggregation of an **associated table comprising aggregated facts** with respect to the associated dimension, as recited in claim 1.

Further, Weissman et al., does not disclose, suggest, or teach stargroups associated with a measure. The Examiner cites a “constellation” described in Weissman et al. as disclosing a stargroup associated with a measure. According to Weissman et al., the constellation is an organization of a schema “that allows for the sharing of dimension tables by sets of similar facts.” (*See* col. 12, lines 24-32). The constellation of Weissman et al. is not associated with a measure, instead it is an overall organization of a schema. “The constellation 302 defines the organization of the schema in the datamart 150. It is the top level table in the schema definition.” (*See* col. 13, lines 19-21, emphasis added). Thus, Weissman et al. does not disclose, suggest, or teach a stargroup associated with a measure, as recited in claim 1. Accordingly, claim 1 is patentably distinguishable from the cited reference.

Claim 2 has been canceled. Therefore the rejection of claim 2 has been rendered moot.

Claim 3 depends from claim 1 and is patentably distinguishable from cited references for at least the same reasons as claim 1. Further, Weissman et al. does not disclose comparing stars. The Examiner has cited aggregates in Weissman et al. as disclosing stars. Applicants respectfully disagree. According to Weissman et al., aggregates correspond to “pre-computed query results for different types of queries.” (See col. 5, lines 38-48). In contrast, as recited in claim 1, a ‘star’ includes fact table, a table for each supported dimension, and set of dimension indicators associated with particular dimensions. The comparison of a “pre-computed result” is not the same as the comparison of stars as recited in claim 3. Thus, Weissman et al. does not disclose comparing stars. Accordingly, claim 3 is further patentably distinguishable from the cited reference.

Claims 4-5 depend from claim 1 and are patentably distinguishable from cited references for at least the same reasons as claim 1.

Claims 6-10 have been rejected in the manner of claims 1-5. Claim 7 has been canceled, and therefore the rejection of claim 7 has been rendered moot. As explained above, claims 1 and 3-5 are patentably distinguishable from the cited references. Accordingly, claims 6 and 8-10 are patentably distinguishable from the cited references for at least the same reasons as claims 1 and 3-5.

Claim 11 was rejected for the same reasons stated by the Examiner for claim 1. As explained above, claim 1 is patentably distinguishable from the cited references. Accordingly, claim 11 is patentably distinguishable from the cited references for at least the same reasons as claim 1.

Claims 12-13 depend from claim 11 and are patentably distinguishable from the cited references for at least the same reasons as claim 11.

Claim 14 depends from claim 11 and is patentably distinguishable from the cited references for at least the same reasons as claim 11. Further as explained above, Weissman et al., does not disclose, suggest, or teach stargroups associated with a measure. According to Weissman et al., a constellation is not associated with a measure, instead it is an overall organization of a schema. Accordingly, claim 14 is further patentably distinguishable from the cited references.

Claim 15 depends from claim 11 and is patentably distinguishable from the cited references for at least the same reasons as claim 11. Further, in the cited sections, Weissman et al. describes an aggregate group and its elements and does not disclose memory means storing stars based on a degree of aggregation of the first aggregate fact tables associated therewith, as recited in claim 15. Accordingly, claim 15 is further patentably distinguishable from the cited references.

Claim 16 depends from claim 11 and is patentably distinguishable from the cited references for at least the same reasons as claim 11.

CONCLUSION

Pending claims 1, 3-6, and 8-16 of the present application are in proper condition for allowance and Applicants accordingly request reconsideration of the prior rejections and objections and allowance of all claims. If the Examiner has any questions regarding this response or the Application in general, the Examiner is invited to contact the Applicants'

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attorney at the below-listed telephone number. A petition for extension of time for three months and a check in the amount of \$950.00 is included herewith. Because this filing adds no new claims, no additional claim fees are required. In the event, however, that additional fees are required to complete this submission, the Commissioner is authorized to deduct any deficiencies from Deposit Account No. 13-0480, Attorney Docket No. 68146988.710.

Respectfully submitted,

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